

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>8413</b>	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416																								
International application No. <b>PCT/EP2004/005127</b>	International filing date (day/month/year) <b>06.05.2004</b>	Priority date (day/month/year) <b>07.05.2003</b>																									
International Patent Classification (IPC) or national classification and IPC																											
Applicant <b>WINDMÖLLER &amp; HÖLSCHER KG</b>																											
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <b>9</b> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <b>3</b> sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <table border="0"><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>				<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																									
<input type="checkbox"/>	Box No. II	Priority																									
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																									
<input type="checkbox"/>	Box No. IV	Lack of unity of invention																									
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																									
<input type="checkbox"/>	Box No. VI	Certain documents cited																									
<input type="checkbox"/>	Box No. VII	Certain defects in the international application																									
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																									
Date of submission of the demand		Date of completion of this report																									
Name and mailing address of the IPEA/EP		Authorized officer																									
Facsimile No.		Telephone No.																									

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005127

Box No. I	Basis of the report
1.	<p>With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:</p> <p><input type="checkbox"/> international search (Rule 12.3 and 23.1(b))</p> <p><input type="checkbox"/> publication of the international application (Rule 12.4)</p> <p><input type="checkbox"/> international preliminary examination (Rule 55.2 and/or 55.3)</p>
2.	<p>With regard to the elements of the international application, this report is based on <i>(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):</i></p> <p><input type="checkbox"/> the international application as originally filed/furnished</p> <p><input checked="" type="checkbox"/> the description:</p> <p>pages <u>7</u> _____ as originally filed/furnished</p> <p>pages* _____ received by this Authority on _____</p> <p>pages* _____ received by this Authority on _____</p> <p><input checked="" type="checkbox"/> the claims:</p> <p>nos. _____ as originally filed/furnished</p> <p>nos.* _____ as amended (together with any statement) under Article 19</p> <p>nos.* <u>1-11</u> received by this Authority on <u>07.03.2005 with letter</u></p> <p>nos.* _____ received by this Authority on <u>of 07.03.2005</u></p> <p><input checked="" type="checkbox"/> the drawings:</p> <p>sheets <u>1/2, 2/2</u> _____ as originally filed/furnished</p> <p>sheets* _____ received by this Authority on _____</p> <p>sheets* _____ received by this Authority on _____</p> <p><input type="checkbox"/> a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.</p>
3.	<p><input checked="" type="checkbox"/> The amendments have resulted in the cancellation of:</p> <p><input type="checkbox"/> the description, pages _____</p> <p><input checked="" type="checkbox"/> the claims, nos. <u>12</u> _____</p> <p><input type="checkbox"/> the drawings, sheets/figs _____</p> <p><input type="checkbox"/> the sequence listing (specify): _____</p> <p><input type="checkbox"/> any table(s) related to sequence listing (specify): _____</p>
4.	<p><input type="checkbox"/> This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).</p> <p><input type="checkbox"/> the description, pages _____</p> <p><input type="checkbox"/> the claims, nos. _____</p> <p><input type="checkbox"/> the drawings, sheets/figs _____</p> <p><input type="checkbox"/> the sequence listing (specify): _____</p> <p><input type="checkbox"/> any table(s) related to sequence listing (specify): _____</p>

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005127

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>3-6, 8</u>	YES
	Claims	<u>1-4, 7, 9, 10-11</u>	NO
Inventive step (IS)	Claims	<u>5, 6</u>	YES
	Claims	<u>1-4, 7-11</u>	NO
Industrial applicability (IA)	Claims	<u>1-11</u>	YES
	Claims	<u></u>	NO

## 2. Citations and explanations (Rule 70.7)

This report refers to the following documents:

D1: US 6 314 883 B1 (WECH ERICH), 13 November 2001 (2001-11-13)  
D2: US 5 551 339 A (REICHENBACH KLAUS ET AL), 3 September 1996  
(1996-09-03)  
D3: EP-A-0 835 753 (HURLETRON INC), 15 April 1998 (1998-04-15)  
D4: DE 198 32 892 A (LEMO MASCHINENBAU GMBH),  
27 January 2000 (2000-01-27)

1. PCT ARTICLE 19(2)

1.1 The feature "**adjustment means** which correct the register simply by controlling the drives for the spindles or cylinders" was not part of the original disclosure and could therefore not be taken into consideration in the amended claim 1.

2. INDEPENDENT CLAIM 1

2.1 The application fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 1 is not novel (PCT Article 33(2)). Document D1 discloses the following (the references in parentheses are to D1):

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005127

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

A colour rotary printing press,

- in which each of the inks that are to be transferred onto the stock (21) is assigned to a printing plate carrier (3, 4) which carries a printing plate (17, 19) and can be attached to a spindle or cylinder (3, 4) in a rotary printing machine in order to transfer the printed image onto the stock (figure 1),
- the rotary printing press having register apparatus (24, 25, 26) to fix the positions of the printing plates (17, 19) with respect to each other (column 2, lines 40 to 55),
- the register apparatus (24, 25, 26, 27) comprising sensors (24, 25) which determine the positions of the printing plate carriers in the printing press (column 2, lines 40 to 55), and
- the register apparatus using the sensors to provide information about the positions of the printing plate carriers before or at the start of a printing job, on the basis of which information control signals can be provided (column 2, lines 52 to 54),

**wherein**

- on the basis of the control signals, the relative phase position of the spindles or cylinders can be adjusted by actuation of the drive that drives the relevant spindle or cylinder (column 2, lines 52 to 54) and/or by shifting of the transmission connection between the drive and the spindle or cylinder (column 3, lines 2 to 3)
- so that printing can then proceed in substantially exact register,
- and wherein each printing plate carrier contains at

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005127

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

least one information carrier from which information can be extracted by a sensor, the automatically readable information being suitable for determining the relative position of the printing plate carrier on the spindle or cylinder in the rotary printing press.

- 2.2 The present application also fails to meet the requirements of PCT Article 33(1) in respect of novelty and inventive step in the light of document D2.

3. INDEPENDENT CLAIM 9

- 3.1 The application fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 9 is not novel (PCT Article 33(2)). Document D1 discloses the following (the references in parentheses are to D1):

A method (claim 10) for setting up a colour rotary printing press before or at the start of a printing job,

- in which each of the inks that are to be transferred onto the stock (21) is assigned to a printing plate carrier (17, 19) which carries a printing plate (17, 19),
- in which the printing plate carriers (17, 19) are attached to a spindle or cylinder (3, 4) in a rotary printing machine in order to transfer the printed image onto the stock (21), and
- in which register apparatus fixes the positions of the printing plates with respect to each other (column 4, lines 44 to 48),
- the register apparatus comprises sensors which

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	<p>determine the positions of the printing plate carriers in the printing press,</p> <p><b>wherein</b></p> <ul style="list-style-type: none"><li>- the register apparatus provides information on the basis of the positions of the printing plate carriers as detected by the sensors,</li><li>- and control signals are obtained on the basis of this information, and</li><li>- the relative phase position (implicit) of the spindles or cylinders is adjusted by actuation of the drive that drives the relevant spindle or cylinder (column 4, line 52) and/or by shifting of the transmission connection between the drive and the spindle on the basis of the control signals.</li></ul> <p>3.2 Claim 1 also lack novelty (PCT Article 33(2)) in the light of document D2.</p> <p>4. <u>DEPENDENT CLAIMS 2 TO 8, 10 AND 11</u></p> <p>4.1 Dependent claims 2 to 4, 7, 8 and 11 do not contain any features that meet the PCT requirements in respect of novelty or inventive step when combined with the features of any of the back-referenced claims. The reasons for this are as follows:</p> <ul style="list-style-type: none"><li>- The additional features specified in dependent claim 2 are also known from document D1. The register apparatus (24, 25, 26, 27) comprises a control device (27) (see claim 2).</li><li>- The feature according to which "the information carrier is <b>outside</b> the printing plate" is one of a</li></ul>

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005127

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

number of obvious possibilities from which a person skilled in the art would choose according to the circumstances in order to solve the problem of interest, without making an inventive contribution (see claim 3).

- The feature "optical, magnetic or electromagnetic information" in dependent claims 7 and 8 has already been used for the same purpose in a similar colour rotary printing press with register apparatus (see document D4, in particular column 1, lines 12 to 15). To a person skilled in the art it is therefore obvious that these features can be incorporated in a colour rotary printing press with sensors as known from D1 with similar results so as to arrive at a colour rotary printing press with register apparatus comprising optical, magnetic or electromagnetic information, as defined in claim 1.
- The feature "relative phase position" is implicit (column 2, lines 51 to 54) and is known from the prior art (see, for example, document D3 or document D4) (claim 10).

4.2 In the opinion of the Examining Authority, the only part of the claimed subject matter that might be novel and inventive is a combination of claims 1 to 4 and 5 or a combination of claims 1 to 4 and 6. There is nothing in the prior art to suggest adding the special technical features relating to the claimed properties of the information carrier (circumference of the spindle/cylinder, position of the information carrier between the printed image and an edge of the printing plate carrier) to the printing press known from D1 in order to improve register correction.

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement6. CLARITY

6.1 Claims 1 and 9 fail to meet the requirements of PCT Article 6 because the subject matter for which protection is sought is not clearly defined. For example, the claims seek to define their subject matter by reference to the result which is to be achieved (printing in exact register), but in doing so merely states the problem addressed without specifying the technical features needed in order to achieve that result.

Moreover, claim 1 is more of a method claim than a device claim. The term "then" is not appropriate for a device claim.

6.2 Claims 1 and 9 are unclear and fail to meet the requirements of PCT Article 6 because the subject matter for which protection is sought is not clearly defined. The claims contain functional details which do not enable a person skilled in the art to determine what technical features are needed in order to perform the stated functions. For example:

- the control signals
- the relative phase position
- ...

6.3 It would appear from the description (page 3, lines 5 to 6) that the following feature is essential to the definition of the invention:

- a control unit (control device - page 5, lines 21 to 25)



## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005127

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

Dependent claims 1 and 9 do not include this feature and therefore fail to meet the requirement of PCT Article 6 in conjunction with PCT Rule 6.3(b), according to which an independent claim must include all the technical features that are essential to the definition of the invention.

6.3 Under PCT Rule 11.13(m), a given feature must always be referred to using the same reference sign throughout the application. This requirement has not been met.

- page 5, line 22: control device 7
- page 6, line 10 and page 7: recess 7
  
- page 5: information carrier 2, magnetic stripe 2
- page 7: sensor 2
  
- page 7: printing plate 6
- page 5: signal line 6

etc.